

**United States Patent** [19]  
**Fullerton**

[11] **Patent Number:** 4,979,186  
[45] **Date of Patent:** \* Dec. 18, 1990

[54] **TIME DOMAIN RADIO TRANSMISSION SYSTEM**

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[\*] Notice: The portion of the term of this patent subsequent to Mar. 14, 2006 has been disclaimed.

[21] Appl. No.: 322,538

[22] Filed: Mar. 13, 1989

**Related U.S. Application Data**

[63] Continuation-in-part of Ser. No. 10,440, Feb. 3, 1987, Pat. No. 4,813,057, which is a continuation-in-part of Ser. No. 677,597, Dec. 3, 1984, Pat. No. 4,641,317.

[51] Int. Cl. H04B 15/00; H04K 1/00

[52] U.S. Cl. 375/23; 375/37

[58] Field of Search 375/1, 23, 37, 96, 115; 370/10, 107; 329/313; 332/106; 307/265, 271; 380/35

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[57] **ABSTRACT**

A time domain communications system wherein time modulated, impulse derived signals are multiplied by a template signal, integrated, and then demodulated. By this process, usable signals are obtained which would be otherwise obscured by noise.

23 Claims, 5 Drawing Sheets

